

RECEIVED  
CENTRAL FAX CENTER

AUG 06 2007

Appl. No. 10/716,580  
Amdt. dated August 3, 2007  
Reply to Office Action of March 5, 2007

PATENT**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) ~~Vector~~ A vector for the expression of immunoglobulin-cytokine fusion proteins in malignant B cells, comprising the following components operably linked to each other
  - (a) a region of at least 1.5 kb which is homologous to a region of the  $\mu$  intron or the  $k$  intron;
  - (b) at least one DNA sequence encoding a ~~domain~~ constant region of an immunoglobulin or a ~~functional part thereof~~ of the constant region;
  - (c) a DNA sequence encoding a cytokine; and
  - (d) a ~~market~~ marker gene which is selectable in eukaryotic B cells and contains a functional enhancer region.
2. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein said region of at least 1.5 kb contains a functional  $C_\mu$  or  $C_k$  enhancer.
3. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein said region of at least 1.5 kb contains a non-functional  $C_\mu$  or  $C_k$  enhancer.
4. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells contains a non-functional enhancer.
5. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells lacks an enhancer.
6. (Canceled) ~~Vector according to claim 1, wherein the DNA sequence of (b) encodes a constant region or a functional part thereof.~~

Appl. No. 10/716,580  
Amdt. dated August 3, 2007  
Reply to Office Action of March 5, 2007

PATENT

7. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the region homologous to a region comprising the  $C_\mu$  or the  $C_k$  enhancer of the  $\mu$  or the  $k$  intron comprises at least 1.9 kb.
8. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the region homologous to a region comprising the  $C_\mu$  or the  $C_k$  enhancer of the  $\mu$  or the  $k$  intron comprises at least 2.0 kb.
9. (Currently amended) ~~Vector~~ The vector according to claim 1, said vector containing a regulatory unit which is compatible with bacteria.
10. (Canceled) ~~Vector according to claim 1, wherein the immunoglobulin of part b is a chimeric immunoglobulin.~~
11. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the DNA sequence of (b) encodes the ~~domain~~ constant region of a human immunoglobulin chain.
12. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the DNA sequence of (b) encodes ~~domains derived from~~ the constant region of a mouse, rat, goat, horse or sheep immunoglobulin.
13. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the DNA sequence of (b) encodes ~~all the C domains~~ the constant region of a secretory antibody.
14. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the DNA sequence according to (b) encodes ~~all the C domains~~ the constant region of a membrane-bound antibody.
15. (Currently amended) ~~Vector~~ The vector according to claim 1, characterized in that said DNA sequence of (c) encodes ~~interleukins, interferons, colony-stimulating factors, lymphokines or growth factors~~ an interleukin, an interferon, a colony-stimulating factor, a lymphokine, or a growth factor.

Appl. No. 10/716,580  
Amdt. dated August 3, 2007  
Reply to Office Action of March 5, 2007

PATENT

16. (Currently amended) ~~Vector~~ The vector according to claim 15, characterized in that said DNA sequence of (c) encodes IL-2, IL-4, IL-7, IL-12, IL-13, GM-CSF or interferon  $\gamma$ .

17. (Currently amended) ~~Vector~~ The vector according to claim 1, wherein the selectable marker gene is gpt, neo, or a marker gene encoding hygromycin resistance.

18-28. (Canceled)

29. (Withdrawn, currently amended) ~~Malignant~~ A malignant B cell containing a vector according to claim 1 in integrated form, wherein an immunoglobulin-cytokine fusion protein is expressed by said cell.

30. (Canceled)